

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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www.miamidade.gov/pera/

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

Kawneer Company, Inc. 555 Guthridge Court Norcross, GA 30092

Score:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "IR-500 Flush, Dry and Wet Glazed" Aluminum Storefront System - L.M.I.

APPROVAL DOCUMENT: Drawing No. 1633, titled "IR500 Aluminum Store Front System - Large Missile Impact" Sheets 1 thru 10 of 10, dated 01/27/09 with revision #A1 dated 06/07/11, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaeffer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # 09-0218.08 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.





NOA No. 11-0621.04 Expiration Date: April 15, 2014 Approval Date: October 27, 2011 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. 1633, titled "IR500 Aluminum Store Front System Large Missile Impact" Sheets 1 thru 10 of 10, dated 01/27/09 with revision #A1 dated 06/07/11, prepared by W. W. Schaeffer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaeffer, P.E.

B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of series IR-500 aluminum flush glazed storefront system, specimens #1A, #1B and #1C, by Hurricane Test Laboratory LLC, Test Report No. **HTL-G049-0402-11**, dated 05/27/11, signed and sealed by Vinu Abraham, P.E.

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of series IR-500 aluminum flush glazed storefront system, specimens #1, 2, 2A, 5, 6, 7 and 8, by Hurricane Test Laboratory LLC, Test Report No. **HTL-G049-0201-08**, dated 03/07/07, signed and sealed by Vinu Abraham, P.E.

(Submitted under previous NOA #09-0218.08)

C. CALCULATIONS

- 1. Revised anchor verification calculations and structural analysis, complying with FBC-2007, dated 02/10/09, revised on 06/09/11, prepared by W. W. Schaeffer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaeffer, P.E.
- 2. Glazing complies with ASTM E1300-04.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

Manuel Perez, P.E. Product Control Examiner NOA No. 14-0621.04

Expiration Date: April 15, 2014 Approval Date: October 27, 2011

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. 'MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 10–0922.09 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite® PVB, Interlayer" dated 12/24/10, expiring on 12/11/11.
- 2. Notice of Acceptance No. **09-0223.05** issued to **Solutia, Inc.** for their "**Saflex Multilayer Glass Interlayer**" dated 04/08/09, expiring on 04/08/14.
- 3. Notice of Acceptance No. 10-0413.04 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Sentry Glass® Interlayer" dated 05/26/10, expiring on 01/14/12
- 4. Exterior Dry-Glazed Push-in Gasket: TREMCO Part No. TR-14130E (Kawneer Part No. 127-122), EPDM Dense Rubber Extrusion with 70 durometer ext. glazing gasket complying with ASTM C864 Option II specs., ASTM D412, 1500 PSI, ASTM D395B, 22 HRS 158°F.
- 5. Interior Dry-Glazed Fixed Gasket: TREMCO Part No. TR-14270E (Kawneer Part No. 127-121), Closed Cell ("sponge") EPDM rubber compound, interior glazing gasket complying with ASTM C509 Option II specification compression deflection limit 20-24psi.
- 6. Exterior Wet-Glazed Push-in Gasket: TREMCO Part No. TR-14271E (Kawneer Part #027-074), EPDM Dense Rubber Extrusion with 70 durometer glazing gasket complying with ASTM C864 Option II specs., ASTM D412 1600 PSI, ASTM D395B, 22 HRS 158°F.
- 7. Interior Wet Glazed Slide-in Spacer: Santoprene Spacer (Kawneer Part #127-012), Dense Silicone Rubber Extrusion (Black) with 60 durometer compatible with silicone glazing.

F. STATEMENTS

- 1. Statement letter of conformance, dated August 17, 2011, signed and sealed by Warren W. Schaefer, P.E.
- 2. Statement letter of no financial interest, dated June 14, 2011, signed and sealed by Warren W. Schaefer, P.E.
- 3. Laboratory compliance letter for Test Report No. HTL-G049-0201-08, issued by Hurricane Test Laboratory, Inc., dated October 14, 2008, signed Jose E. Colon, E.I.
- 4. Test Proposal #10-1277, dated 01/27/11, issued by BNC, signed by Manuel Perez, P.E.
- 5. Laboratory compliance letter for Test Report No. HTL-G049-0402-11, issued by Hurricane Test Laboratory, Inc., dated 05/27/11, signed and sealed by Jose E. Colón, E.I.

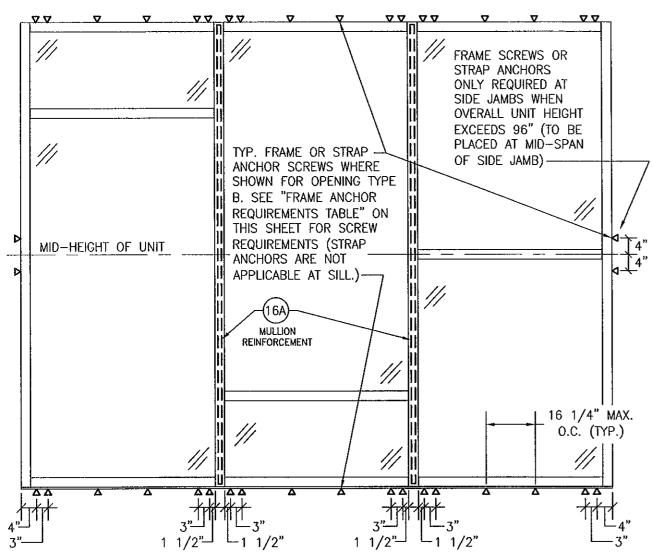
G. OTHERS

1. Notice of Acceptance No. **09-0218.08**, issued to Kawneer Company, Inc., for their Series "IR-500 Flush, Dry and Wet Glazed" Aluminum Storefront System – L.M.I., approved on 04/15/09 and expiring on 04/15/14.

Manuel Perez, P.E. Product Control Examiner NOA No. 11-0621.04

Expiration Date: April 15, 2014 Approval Date: October 27, 2011

HECKED BY **GENERAL NOTES:** FOR MAX. D.L.O. WIDTH, FOR MAX. D.L.O. WIDTH, FOR MAX. D.L.O. WIDTH, THESE STORE FRONT SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT ATE: 01/27/09 · 2 1/2" 1=24 SEE GLASS PRESSURE SEE GLASS PRESSURE SEE GLASS PRESSURE TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S). TABLE ON SHEET 2. TABLE ON SHEET 2. 2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER TABLE ON SHEET 2. WIND LOADS TO THE STRUCTURE. 3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE 2 1/2" -- 2 1/2' BEYOND WALL FINISH OR STUCCO. 4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCALS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT STORE FRONT SYSTEMS. $\nabla \nabla \nabla$ $\nabla \nabla \nabla$ 5. THESE STORE FRONT SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ) 6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE STORE FRONTS. FRAME SCREWS OR USE OF SECTION A/4 7. ALL ANCHORS SECURING FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF STRAP ANCHORS SHALL LIMIT THE RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD. - 2 1/2" ONLY REQUIRED AT 8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN **ALLOWABLE** ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN SIDE JAMBS WHEN PRESSURE ON THE ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF Kd = 0.85 MAY BE APPLIED OVERALL UNIT HEIGHT WHEN USED IN CONJUNCTION WITH LOAD COMBINATIONS SPECIFIED IN SECTION 2.0 OF THE ASCE 7 STANDARD. ENTIRE UNIT TO EXCEEDS 96" (TO BE 9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD +/-65 PSF MAX. MULLION ET 2. DURATION FACTOR Cd = 1.6 WAS USED FOR WOOD SCREW ANALYSIS ONLY. PLACED AT MID-SPAN 8 10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER OF SIDE JAMB) H2 (8) IMPACT DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20. CORNER & FRAME END CONSTRUCTION: GLASS FRAME HEAD CORNER (APPLICABLE TO ITEM #1A & 1B); HEAD IS SQUARE CUT, BUTTED TO SIDE, FASTENED WITH THREE(3) NO. 12 X 1" PHTFS FASTENERS THROUGH THE SIDE MEMBER INTO THE HEAD 16A) MEMBER SCREW SPLINÈS & SEALED WITH SILICONE. MAX. UNIT HEIGHT, PRESSURE TABLE ON FOR MAX. D.L.O. HEIGHT, SEE PRESSURE TABLE ON SHEET MULLION 2 1/2' FRAME HEAD CORNER (APPLICABLE TO ITEM #1C): HEAD IS MITER OR SQUARE CUT, BUTTED TO SIDE, FASTENED REINFORCEMENT MID-HEIGHT OF UNIT WITH TWO(2) NO. 12 X 1 1/2" PHTFS FASTENERS THROUGH THE SIDE MEMBER INTO THE HEAD MEMBER SCREW FRAME SILL CORNER: SILL IS SQUARE CUT, BUTTED TO SIDE, FASTENED WITH THREE(3) NO. 12 X 1" PHTFS FASTENERS THROUGH THE SIDE MEMBER INTO THE SILL MEMBER SCREW SPLINES & SEALED WITH SILICONE. LOAD WIDTH LOAD WIDTH FRAME DOOR JAMB SILL CORNER: SILL IS SQUARE CUT, BUTTED TO SIDE, FASTENED WITH 1 JAMB PIVOT ASSEMBLY, EACH PIVOT ASSEMBLY WAS FASTENED TO TO THE SIDE WITH THREE(3) NO. 12-24 X 5/8" FHMS. THE THRESHOLD IS THEN FASTENED TO PIVOT ASSEMBLY WITH TWO(2) NO. 12-24 X 3/8" FHMS & SEALED HORIZONTAL FRAME MULLION END (APPLICABLE TO ITEMS #6A & #7): HORIZONTAL IS SQUARE CUT, BUTTED TO SYSTEM SIDE, FASTENED WITH THREE(3) NO. 12 X 1" SS PHTFS FASTENERS THROUGH THE SIDE MEMBER INTO THE MULLION MEMBER SCREW SPLINES & SEALED WITH SILICONE. - 2 1/2" HORIZONTAL FRAME MULLION END (APPLICABLE TO ITEM #6B): HORIZONTAL IS SQUARE CUT, BUTTED TO SIDE, JOINED VIA A SHEAR BLOCK (PART #21). THE SHEAR BLOCK IS FASTENED TO THE VERTICAL FRAME MEMBER WITH FOUR(4) NO. 12 X 1 7/8" FHTF TYPE B SCREWS. THE HORIZONTAL MEMBER IS FASTENED TO THE SHEAR FRONT 16 1/4" MAX. BLOCK WITH THREE(3) NO. 12 X 1" FHTF TYPE AB SCREWS. EACH CORNER IS SEALED WITH DOW 795 SILICONE O.C. (TYP.) P.A. (CA 6809) ALUMINUM FRAME ANCHOR REQUIREMENTS TABLE SULTANTS W. SCHAEFER CONSULTING, P 7480 150TH COUR PALM BEACH GARDENS PHONE: 561-744 FRAME & STRAP ANCHOR SCREWS **GLASS** TYP, FRAME OR STRAP GLASS GLASS IIILE IR500 OPENING TYPE CENTERLINE CENTERLINE ANCHOR SCREWS WHERE OPENING MINIMUM MINIMUM CENTERLINE FRAME TO OPENING FASTENER TYPE TYPE **EMBED** EDGE DIST SHOWN FOR OPENING TYPE (SUBSTRATE) EXTERIOR ELEVATION A, C, D OR E, SEE "FRAME MIN. 2X6 WOOD FRAME OR BUCK (4) NO. 14 SMS OR WOOD SCREW 1 1/4" 3/4" ANCHOR REQUIREMENTS Α MULTIPLE FIXED PANEL STORE FRONT ASSEMBLY (MIN. GR. 3 & G≔0.55) TABLE" ON THIS SHEET FOR ેલ **≥ંલ્ય** (WHEN ANCHORED TO WOOD, METAL STUD, CONCRETE OR CMU) 1/4" GR. 5 SELF TAP/DRILL SCREW 1/2" MIN. 1/8" THK A36 STEEL FULL В SCREW REQUIREMENTS SCALE: 1/2"=1'-0" (STRAP ANCHORS ARE NOT (1) 1/4" CONCRETE SCREW 1 1/2' 2 1/2" MIN. 3000 PSI CONCRETE C HORIZONTAL STACKING & OVERALL UNIT WIDTH IS UNLIMITED PROVIDING DIMENSIONS APPLICABLE AT SILL.) MIN. 16 GA. 33 KSI METAL STUD 1/4" GR. 5 SELF TAP/DRILL SCREW 1/2" FULL D SPECIFIED ARE NOT EXCEEDED. NUMBER OF VERTICAL PANELS IS UNLIMITED BUT 2011 (1) 1/4" CONCRETE SCREW 1 1/4" 2 1/2" MIN. C-90 CMU Ε MUST FIT INSIDE MAXIMUM UNIT HEIGHT SHOWN. (2) 3/8" WEDGE/SLEEVE ANCHOR 2 1/2" (3) F MIN. 3000 PSI CONCRETE NOTE: CMU IS APPLICABLE ONLY AT SIDES 8 CN2 (1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.). PRODUCT REVISED (2) WEDGE/SLEEVE ANCHORS SHALL BE RAMSET/RED HEAD DYNABOLT, HILTI KWIK-BOLT 3, OR as complying with the Florida POWERS RAWL POWER BOLT (STEEL OR S.S.) Building Code (3) ANCHOR TYPE "F" IS ONLY APPLICABLE FOR USE WITH THE SILL ANCHOR BLOCK AT THE Acceptance No 11-VERTICAL DOOR MULLION BOTTOM END. 1633 (4) WHILE 1/4" MAX. SHIM GAP IS SPECIFIED IN THE SECTIONS, A 3/8" SHIM GAP MAY BE USED WITH ALL SUBSTRATES PROVIDING THE SCREWS ARE AS SPECIFIED IN THIS TABLE EXCEPT THAT SHEET NO THE SCREWS TO WOOD SUBSTRATE MUST BE 1/4"-14 GRADE 5 SCREWS. of 10



EXTERIOR ELEVATION MULTIPLE FIXED PANEL STORE FRONT ASSEMBLY (WHEN ANCHORED TO STEEL) SCALE: 1/2"=1'-0"

- * FOR ALL FRAMING & D.L.O. DIMENSIONS AND OTHER INFORMATION NOT SHOWN, SEE ELEVATION ON SHEET 1.
- * IF SILL IS CONCRETE, SEE ELEVATION ON SHEET 1 FOR SILL ANCHORAGE REQUIREMENTS.

MULLION ALLOWABLE										
DESIGN PRESSURE										
MAXIMUM UNIT	MAXIMUM LOAD	ALLOWABLE PRESSURE (+/- PSF)								
HEIGHT (IN.)	WIDTH (IN.)	NON REINFORCED	REINFORCED							
	60	N/A	54.7							
	54	N/A	60.8							
120	50 1/2	N/A	65.0							
120	48	N/A	68.4							
	42	N/A	78.2							
	36	N/A	90.0							
	60	N/A	63.2							
	54	N/A	70.2							
108	50 1/2	N/A	75.1							
	48	N/A	79.0							
	42	N/A	90.0							
	60	N/A	75.0							
100	54	N/A	83.4							
102	50 1/2	N/A	89.1							
	48	N/A	90.0							
96	60	90.0	90.0							

NOTES:

- 1. SEE ELEVATIONS FOR DIMENSIONING OF LOAD WIDTH.
- 2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT SPECIFIED FOR THE GLASS.
- 3. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT REINFORCEMENT CONDITION.
- 4. SEE SECTION H2/8 FOR DETAIL OF NON-REINFORCED MULLION & SECTION H1/8 FOR REINFORCED MULLION.

GLASS ALLOWABLE PRESSURE TABLE								CHECKED BY: W.W.S.		
MAXIMUM	MAXIMUM	ALLOWABLE PRESSURE (+/- PSF)			PLOT: 1=24			DATE: 01/27/09		
D.L.O.	D.L.O.					T	Т	П		
HEIGHT	WIDTH	GLASS	GLASS	DATE			-			
(IN.)	(IN.)	OPTION	OPTION	_		Ш	_	上	<u> </u>	
		1, 2 & 5	3 & 4	₽						
91	57 1/2	N/A	90	╟		-	┰	十	H	
92 3/4	48	65	90	N O						
97	54	N/A	90	F			-	1		
97	45 3/4	65	90	DESCRIPTION			1			
103	50 3/4	N/A	90	II —						
103	43 1/4	65	90	REVISION					1	
109	48	N/A	90	12		li		1		
109	40 3/4	65	90	<u>ું</u>	H	H	+	†-	 	
115	45 1/2	N/A	90	╠		┝┵		ــــــــــــــــــــــــــــــــــــــ	<u> </u>	
115	38 3/4	65	90		5					
NOTES:		-			MPACT	l				
1. SEE FU	FVATIONS FO	OR DIMENSION	ING OF		∑	ı				

- D.L.O. HEIGHT & WIDTH.
- 2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT SPECIFIED FOR THE VERTICAL MULLIONS.
- 3. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT REINFORCEMENT CONDITION.

2011 SEP 1633

> SHEET NO. of 10

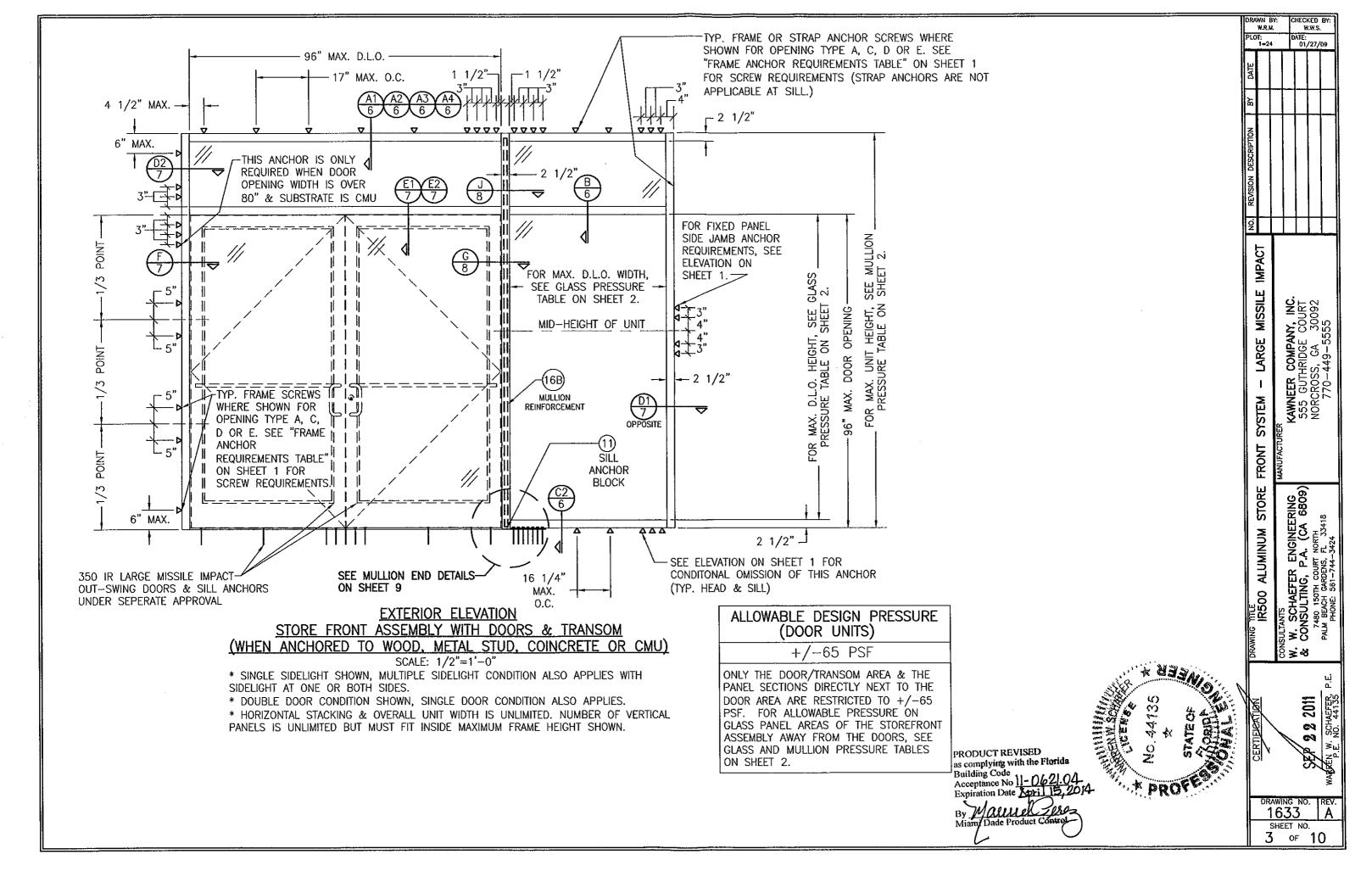
MISSILE

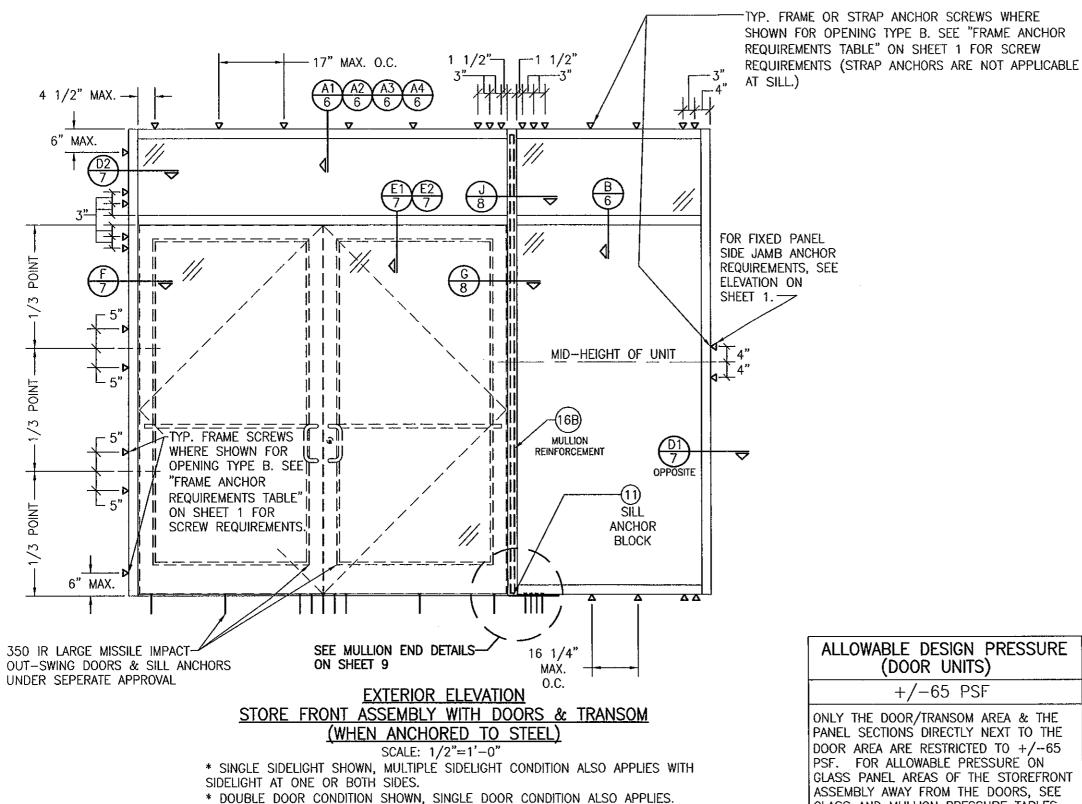
LARGE

SYSTEM

PRODUCT REVISED as complying with the Florida

Acceptance No 11-0621.04





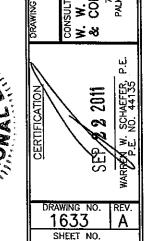
* HORIZONTAL STACKING & OVERALL UNIT WIDTH IS UNLIMITED, NUMBER OF VERTICAL

PANELS IS UNLIMITED BUT MUST FIT INSIDE MAXIMUM FRAME HEIGHT SHOWN. * FOR ALL FRAMING & D.L.O. DIMENSIONS, SEE ELEVATION ON SHEET 3.

ALLOWABLE DESIGN PRESSURE

ONLY THE DOOR/TRANSOM AREA & THE PANEL SECTIONS DIRECTLY NEXT TO THE DOOR AREA ARE RESTRICTED TO +/--65 PSF. FOR ALLOWABLE PRESSURE ON GLASS PANEL AREAS OF THE STOREFRONT ASSEMBLY AWAY FROM THE DOORS, SEE GLASS AND MULLION PRESSURE TABLES ON SHEET 2.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 11-0/621.04



4 of 10

CHECKED BY: W.W.S.

01/27/09

IMPACT

MISSILE

LARGE

SYSTEM

FRONT

STORE

ALUMINUM

ENGINEERING P.A. (CA 6809)

